

Available online at [www.sciencedirect.com](http://www.sciencedirect.com)

## Public Health

journal homepage: [www.elsevier.com/puhe](http://www.elsevier.com/puhe)

## Original Research

# Vaccination against pertussis and influenza in pregnancy: a qualitative study of barriers and facilitators



Anna Maisa <sup>a,b</sup>, Sarah Milligan <sup>a</sup>, Alison Quinn <sup>a</sup>, Denise Boulter <sup>a</sup>,  
Jillian Johnston <sup>a</sup>, Charlene Treanor <sup>c</sup>, Declan T. Bradley <sup>a,c,\*</sup>

<sup>a</sup> Public Health Agency, Belfast, Northern Ireland, UK

<sup>b</sup> European Programme for Intervention Epidemiology Training (EPIET), European Centre for Disease Prevention and Control (ECDC), Stockholm, Sweden

<sup>c</sup> Centre for Public Health, Queen's University Belfast, Belfast, Northern Ireland, UK

## ARTICLE INFO

## Article history:

Received 13 March 2018

Received in revised form

14 May 2018

Accepted 30 May 2018

## Keywords:

Vaccination

Immunisation

Pregnancy

Qualitative research

Influenza

Pertussis

## ABSTRACT

**Objectives:** Influenza and pertussis vaccination programmes have been in place for pregnant women in the UK since 2009 and 2012, respectively. In 2015, vaccine uptake rates were 55% for influenza and 63% for pertussis in Northern Ireland. We conducted a qualitative study with the aim of learning about the views of pregnant women and identifying potential barriers to vaccination in pregnancy.

**Study design:** Qualitative study using focus groups and in-depth interviews.

**Methods:** We conducted focus group discussions and interviews on vaccination in pregnancy using a discussion guide developed in consultation with stakeholders and service users. Pregnant women were recruited on-street. We performed inductive coding of transcripts and thematic analysis, using a phenomenological approach.

**Results:** Sixteen pregnant women participated. We identified six key themes. *Information and knowledge:* Vaccinated and unvaccinated women demonstrated similar levels of knowledge and desire for information, preferring direct communication with healthcare professionals. *The influence of others:* Some vaccinated participants reported firm endorsements of vaccination by healthcare professionals including midwives, while some unvaccinated women recalled neutral or reticent staff. *Acceptance and trust:* Most women expressed trust of health professionals. *Fear and distrust:* Vaccinated individuals expressed concerns about side-effects more than unvaccinated women. A few unvaccinated women expressed distrust of vaccines and healthcare systems. *Responsibility for the baby:* Both groups prioritised protecting the baby but unvaccinated participants were concerned about vaccine-related harm. *Accessing vaccination:* Multiple appointments, lack of childcare, time off work and having responsibility to organise vaccination hindered some participants from getting immunised. Some women were willing to be vaccinated but did not recall being offered vaccination or were not sufficiently motivated to make arrangements themselves.

\* Corresponding author. Public Health Agency Linenhall Street Unit, 12-22 Linenhall Street, Belfast BT2 8BS, UK.

E-mail address: [declan.bradley@hscni.net](mailto:declan.bradley@hscni.net) (D.T. Bradley).

<https://doi.org/10.1016/j.puhe.2018.05.025>

0033-3506/© 2018 The Royal Society for Public Health. Published by Elsevier Ltd. All rights reserved.

*Conclusion:* Healthcare professionals appear to have a vital influential role in pregnant women's decisions about vaccination. Involving midwives and improving convenience of vaccination access may increase uptake. Strategies to develop interventions should address the aforementioned barriers to meet the pregnant women's needs.

© 2018 The Royal Society for Public Health. Published by Elsevier Ltd. All rights reserved.

## Introduction

Seasonal influenza and pertussis are common, but potentially serious, communicable diseases that can be prevented by vaccination. Seasonal influenza infection during pregnancy may result in serious complications for the woman, and the newborn, who can catch the infection from the mother.<sup>1</sup> Since the 2009 influenza A/H1N1 pandemic, pregnant women have been eligible for influenza vaccination at any stage of pregnancy during the influenza season.<sup>2</sup> Uptake for the 2015/16 seasonal influenza vaccine by pregnant women in Northern Ireland (NI) was 55%<sup>3</sup> and 42% in England.<sup>4</sup> The childhood pertussis vaccine greatly reduces the incidence of pertussis, but infants are at risk of pertussis-related hospitalisation and death before they are vaccinated or develop an adequate immune response.<sup>5</sup> Babies of women who receive pertussis vaccination during their pregnancy have a 90% reduced risk of pertussis during the first two months of life.<sup>6,7</sup> In 2012, the United Kingdom experienced a national outbreak of pertussis in infants too young to be vaccinated,<sup>8,9</sup> leading to the recommendation that pregnant women be vaccinated for pertussis between 28 and 32 weeks of pregnancy to protect the infant via maternal antibodies.<sup>9</sup> This recommendation was extended, and since 2016, pertussis vaccination can be given from week 16 of pregnancy.<sup>10</sup> In 2015, uptake of pertussis vaccination among pregnant women was estimated to be 63% in NI<sup>11</sup> and 58% in England.<sup>12</sup>

There is limited information available about whether low uptake of seasonal influenza and pertussis vaccinations by pregnant women is due to factors relating to the healthcare system, women's knowledge, attitudes and beliefs, social norms, or a combination of these factors. We designed and conducted a qualitative study to investigate the reasons why pregnant women receive, or do not receive, vaccination during pregnancy. The aim of the study was to provide information that would help us plan improvements to services that offer vaccinations to pregnant women.

## Methods

### Study design

We chose a qualitative study design to elicit information about pregnant women's knowledge, attitudes, beliefs, and experiences relating to vaccination in pregnancy. We developed a discussion guide as part of a multidisciplinary group, including a midwife consultant, general practitioner, public health doctors and nurses, an epidemiological scientist, and an academic with experience of qualitative study design and

conduct. The discussion guide was refined in consultation with members of a maternity services user reference group to ensure acceptability. We interviewed women in focus groups, separated by their vaccination status allowing freedom of different views to be expressed. In-depth interviews were planned with pregnant women from a migrant background to ensure that the experience of migrant women was represented in the study. We commissioned a market research company that is accredited under the Interviewer Quality Control Scheme (<http://iqcs.org>) and certified to ISO 20252, ISO 9001, and ISO 27001 standards to recruit participants and facilitate focus group discussions at their facilities and in-depth interviews at the participant's home.

### Research ethics statement

Research ethics approval was obtained from the NHS Health Research Authority, West Midlands–Coventry & Warwickshire Research Ethics Committee (REC reference number 17/WM/0076).

### Recruitment

Pregnant women were opportunistically approached on-street (Table 1). To ensure diversity, the market research company aimed to recruit participants of different ages, social grades, and number of previous pregnancies for each group. Potential participants who met the inclusion criteria received an information leaflet and had a discussion with the recruiter. They had a 'cooling off' period before consent was taken and

**Table 1 – Inclusion and exclusion criteria for participants of focus groups and in-depth interviews.**

Criteria Type	Criteria
Inclusion criteria	Adult female (aged $\geq 18$ years) $\geq 16$ weeks pregnant at time of recruitment Vaccinated or not vaccinated against influenza and/or pertussis during pregnancy Resident in Northern Ireland within reasonable travelling distance of Belfast
Additional inclusion criterion for in-depth interviews	Migrant background (born outside UK or Ireland)
Exclusion criteria	Acquainted persons, i.e. friends or relatives Having participated in a focus group discussion in past 12 months

Download English Version:

<https://daneshyari.com/en/article/7525364>

Download Persian Version:

<https://daneshyari.com/article/7525364>

[Daneshyari.com](https://daneshyari.com)